

AMENDMENT TO THE CLAIMS

1. **(Currently Amended)** A method for identifying an agonist WSX receptor antibody with a strong binding affinity~~which decreases body weight or fat depot weight or food intake in an obese animal~~, comprising the steps of

(a) producing one or more agonist antibodies which specifically bind to the extracellular domain of a receptor having a WSX motif comprising the extracellular domain sequence within SEQ ID NO:2, and

(b) selecting ~~the~~ an agonist antibody ~~antibodies~~ produced in step (a) which induce a statistically significant decrease in body weight or fat depot weight or food intake in an obese animal binds to said extracellular domain with a Kd of no more than about 1×10^{-7} M

2. **(Currently Amended)** The method of claim 1 wherein said antibody decreases body weight or fat-depot weight or food intake in an *ob/ob* obese animal ~~is an *ob/ob* mouse~~.

3. **(Previously Amended)** The method of claim 1 wherein said antibodies produced in step (a) specifically bind to human receptor variant 13.2 (SEQ ID NO:2).

4. **(Currently Amended)** The method of claim 1 wherein said ~~antibodies produced in step (a) bind to the extracellular domain of said receptor having a WSX motif with a Kd is of~~ no more than about 1×10^{-8} M.

5. **(Previously Amended)** The method of claim 4 wherein said Kd is no more than about 1×10^{-9} M.

6. **(Previously Amended)** The method of claim 3 wherein said antibodies also bind to murine receptor having a WSX motif.

7. **(Previously Amended)** The method of claim 1 wherein said antibodies produced in step (a) have an IC50 in a KIRA ELISA of about 0.5 μ g/ml or less.

8. **(Previously Amended)** The method of claim 7 wherein said antibodies have an IC50 in a KIRA ELISA of about 0.2 μ g/ml or less.

9 - 10 **(Previously Cancelled)**

11. **(Previously Amended)** The method of claim 1 wherein said antibodies bind to the epitope bound by an antibody selected from the group consisting of 2D7 (ATCC

Accession Number HB-12249), 1G4 (ATCC Accession Number HB-12243), 1E11 (ATCC Accession Number HB-12248) and 1C11 (ATCC Accession Number HB-12250).

12. **(Previously Amended)** The method of claim 1 wherein said antibodies have complementarity determining region (CDR) residues from an antibody selected from the group consisting of 2D7 (ATCC Accession Number HB-12249), 1G4 (ATCC Accession Number HB-12243), 1E11 (ATCC Accession Number HB-12248) and 1C11 (ATCC Accession Number HB-12250).

13. -21. **(Previously Withdrawn)**

22. **(Previously Amended)** The method of claim 1 wherein at least one of said antibodies produce in step (a) comprises hypervariable region residues of clone 3 antibody (SEQ ID NO: 48).

23. - 24. **(Previously Withdrawn)**

25. **(Previously Amended)** The method of claim 1 wherein said antibodies produced in step (a) are monoclonal antibodies.

26. **(Previously Amended)** The method of claim 1 wherein at least one of said antibodies produced in step (a) is a human antibody.

27. **(Previously Amended)** The method of claim 1 wherein at least one of said antibodies produced in step (a) is a humanized antibody.

28. **(Previously Amended)** The method of claim 1 wherein at least one of said antibodies produced in step (a) is an antibody fragment.

29. **(Previously Amended)** The method of claim 28 wherein said antibody fragment is an F(ab')₂.

30-33 **(Previously Withdrawn)**